

ABSTRACT

A system of machining a workpiece with a router bit includes a plate insert for a router table having a work surface over which the workpiece is to be moved. The router is mounted underneath the plate with the bit driven about a bit axis which is at right angles to the table surface and projecting through a bit opening. At least one and preferably two suction openings through the table from the work surface to an opposed side of the table are connected to a common suction duct with the suction opening or openings being at a location spaced from the bit opening and preferably spaced at right angles from the bit axis. The workpiece is moved or arranged on the table surface so as to define a passage for the waste material from the bit to the suction opening. In one embodiment, the openings are arranged inside the area of the end plate of the router and connected to a duct formed in the end plate. In another embodiment, the openings are outside the end plate and connected to a common suction housing separate from the router.